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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO.       |
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| 10/658,776  | 09/10/2003  | Thomas E. Mullan     | 116807                  | 3910                   |
| 25944   | 7590        | 08/09/2007           |                         |                        |
| OLIFF & BERRIDGE, PLC<br>P.O. BOX 19928<br>ALEXANDRIA, VA 22320 |             |                      | EXAMINER<br>AJAYI, JOEL |                        |
|   |             |                      | ART UNIT<br>2617        | PAPER NUMBER           |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/658,776

Applicant(s)

MULLAN ET AL.

Examiner

Joel Ajayi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10-13, 15, 16, 18, 19 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-13, 15, 16, 18, 19 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 5-8, 10-13, 15, 16, 18, 19, and 22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-3, 5-8, 10-13, 15, 16, 18, 19, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Leuca et al. (U.S. Patent Number: 6,201,797)** in view of **Montebruno et al. (U.S. Patent Application Number: 2004/0192198)**.

Consider **claim 1**; Leuca discloses a mobile platform high-speed broadband communications system for a mobile platform, the mobile platform high-speed broadband communications system (column 2, lines 48-66; column5, line 29 – column 6, line 7) comprising:

A mobile communication terminal (laptop) having a single first antenna, the mobile communication terminal being mounted in a vehicle (aircraft) and in two-way communication with one or more individual data terminal devices (data transport mechanism) in the vehicle and with a satellite through the first antenna (column5, line 29 – column 6, line 7); and a base station (ground station) in two-way communication with the satellite, wherein a return link signal is transmitted from the first antenna of the mobile communication terminal via the satellite to the base station (uplink is via a satellite system, NATS, column 5, lines 4-8), and a forward link signal controlled by the base station is transmitted form the base station via the satellite and the first antenna to the mobile communication terminal (downlink is via a satellite system, DBS, column 5, lines 4-8), the return signal and the forward link signal being transmitted on a same frequency (it is well known in the art that data is requested and received at a designated frequency, column 1, lines 21-25) and via a same transponder in the satellite (column 4, lines 52-55), and the return signal requesting and the forward signal enabling broadband communication with the one or more individual data terminal devices (column 5, line 29 – column 6, line 7).

Except:

The forward link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps.

In the same field of endeavor Montebruno discloses that the forward link signal using a signaling rate in a range from 512 kbps to 3.5 Mbps (2 Mbps for High Multimedia services) (paragraph 6, lines 1-4; paragraph 52, lines 1-7; paragraph 53, line 4 – paragraph 54, line 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Montebruno into the method of Leuca in order to provide a qualitatively acceptable service to customers.

Consider **claim 11**; Leuca discloses a method for high-speed broadband communicating for a mobile platform (column 2, lines 48-66; column 5, line 29 – column 6, line 7), the method comprising:

Transmitting a first signal from a mobile communication terminal (laptop) mounted in a vehicle (aircraft) via a first antenna and a satellite to a base station (ground station) (uplink is via a satellite system, NATS, column 5, lines 4-8); and transmitting a second signal controlled by the base station from the base station via the satellite and the first antenna to the mobile communication terminal (downlink is via a satellite system, DBS, column 5, lines 4-8), wherein the second signal is controlled by the base station in response to a data request contained in the first signal, the first and second signals are transmitted on a same frequency (it is well known in the art that data is requested and received at a designated frequency, column 1, lines 21-25) and via a same transponder in the satellite (column 4, lines 52-55), and second signal enables broadband communication with one or more individual data terminal devices (data transport mechanism) in the vehicle (column 5, line 29 – column 6, line 7).

Except:

The second signal uses a signaling rate in a range from 512 kbps and 3.5 Mbps.

In the same field of endeavor Montebruno discloses that the second signal uses a signaling rate in a range from 512 kbps to 3.5 Mbps (2 Mbps for High Multimedia services) (paragraph 6, lines 1-4; paragraph 52, lines 1-7; paragraph 53, line 4 – paragraph 54, line 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Montebruno into the method of Leuca in order to provide a qualitatively acceptable service to customers.

Consider **claim 18**; Leuca discloses a method for high-speed broadband communicating for a mobile platform (column 2, lines 48-66; column 5, line 29 – column 6, line 7), the method comprising:

Generating a first signal in a mobile communication platform in a vehicle (aircraft) based on a request from a data terminal device in the vehicle in two-way communication with the mobile communication terminal (laptop); transmitting the first signal from the mobile communication terminal via an antenna in the vehicle and a satellite to a base station (uplink is via a satellite system, NATS, column 5, lines 4-8); relaying a data request contained in the first signal from the base station to a node of a remote network (column 5, line 29 – column 6, line 7); receiving, at the base station, data in response to the data request from the node of the remote network (column 5, line 29 – column 6, line 7); transmitting a second signal comprising the data received from the node of the remote network from the base station via the satellite to the mobile communication terminal (downlink is via a satellite system, DBS, column 5, lines 4-8); and transmitting the data contained in the second signal from the mobile communication terminal to

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the data terminal device in the vehicle, wherein the second signal is controlled by the base station in response to the data request contained in the first signal, the first and second signals are transmitted on a same frequency (it is well known in the art that data is requested and received at a designated frequency, column 1, lines 21-25) and via a same transponder in the satellite (column 4, lines 52-55), and the second signal enables broadband communication from the node of the remote network to the data terminal device in the vehicle (column 5, line 29 – column 6, line 7).

Except:

The second signal uses a signaling rate in a range from 512 kbps and 3.5 Mbps.

In the same field of endeavor Montebruno discloses that the second signal uses a signaling rate in a range from 512 kbps to 3.5 Mbps (2 Mbps for High Multimedia services) (paragraph 6, lines 1-4; paragraph 52, lines 1-7; paragraph 53, line 4 – paragraph 54, line 4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the teachings of Montebruno into the method of Leuca in order to provide a qualitatively acceptable service to customers.

Consider **claims 2, 16, and 22**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the vehicle is an aircraft and the mobile communication terminal and the first antenna are compatible with size, weight, and power constraints of the aircraft (column 3, line 59 – column 4, line 8).

Consider **claim 3**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the first antenna is capable of maintaining

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a communication lock on the satellite when the vehicle is in motion (data is received and sent when the aircraft is in motion) (column 5, lines 40-56).

Consider **claim 5**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the base station links the one or more individual terminal devices (data transport mechanism) in the vehicle to a remote network (e.g. Internet) via the mobile communication terminal and the satellite for broadband communication between the one or more individual data terminal device and the remote network (column 2, line 58 – column 3, line 30).

Consider **claim 6**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the remote network is a private network (column 2, lines 22-25)

Consider **claim 7**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the remote network is the Internet (column 2, lines 22-25).

Consider **claims 8, 12, and 19**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the communication between the remote network and the base station is two-way communication (column 2, lines 22-25; column 5, lines 40-48); the return link signal is a request for data from the Internet communication (column 2, lines 22-25; column 5, lines 40-48); and the forward link signal is a response to the request communication (column 2, lines 22-25; column 5, lines 40-48).

Consider **claim 10**; Leuca discloses the mobile platform high-speed broadband communication system for a mobile platform, wherein the mobile communications terminal



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further comprises a second antenna for communicating with a receiver other than the satellite (terrestrial gateway) (column 5, lines 33-37).

Consider **claim 13**; Leuca discloses generating, at the base station, the second signal in response to the first signal (column 5, lines 44-46).

Consider **claim 15**; Leuca discloses generating, in the mobile communication terminal, the first signal in response to a data communication request from the one or more individual data terminal devices in the vehicle, the one or more individual data terminal devices being in two-way communication with the mobile communications terminal (column 2, line 58 – column 3, line 7; column 5, lines 40-48).

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

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Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday 7:30am to 4:00 pm.


If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Joel Ajayi*

August 06, 2007

  
CHARLES N. APPIAH  
SUPERVISORY PATENT EXAMINER